The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte BARRETT E. COLE, WEI YANG and THOMAS E. NOHAVA

Appeal No. 2006-1685 Application No. 10/081,369

ON BRIEF

MAILED

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U.S. PATENT AND TRADEMARK OFFICE BOARD OF PATENT APPEALS AND INTERFERENCES

Before KRASS, JERRY SMITH, and SAADAT, <u>Administrative Patent</u> Judges.

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's rejection of claims 1-17 and 19-24. Pending claims 18 and 42 have been indicated by the examiner to contain allowable subject matter.

The following rejections are on appeal before us:

- 1. Claims 1-4, 9 and 43 stand rejected under 35 U.S.C. §
 103(a) as being unpatentable over the teachings of Cole in view of Tokuda.
- 2. Claims 5-8 and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the teachings of Cole in view of Tokuda and further in view of Hier and Kozlowski.
- 3. Claims 10, 11, 13-17, 19, 23, and 24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the teachings of Cole in view of Tokuda and further in view of Yokoi.
- 4. Claims 20-22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the teachings of Cole in view of Tokuda and Yokoi and further in view of Hier and Kozlowski.

Rather than repeat the arguments of appellants or the examiner, we make reference to the briefs and the answer for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the examiner and the evidence of obviousness relied upon by the examiner as support for the

rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellants' arguments set forth in the briefs along with the examiner's rationale in support of the rejections and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in the claims on appeal. Accordingly, we reverse.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966). The examiner must articulate reasons for the examiner's decision. In re Lee, 277 F.3d 1338, 1342, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002). In particular, the examiner must show that

there is a teaching, motivation, or suggestion of a motivation to combine references relied on as evidence of obviousness. Id. at 1343, 61 USPQ2d at 1433-34. The examiner cannot simply reach conclusions based on the examiner's own understanding or experience - or on his or her assessment of what would be basic knowledge or common sense. Rather, the examiner must point to some concrete evidence in the record in support of these findings. In re Zurko, 258 F.3d 1379, 1386, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001). Thus the examiner must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the examiner's conclusion. However, a suggestion, teaching, or motivation to combine the relevant prior art teachings does not have to be found explicitly in the prior art, as the teaching, motivation, or suggestion may be implicit from the prior art as a whole, rather than expressly stated in the references. The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would

have suggested to those of ordinary skill in the art. Kahn, 441 F.3d 977, 987, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006) (citing In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1316-1317 (Fed. Cir. 2000)). See also In re Thrift, 298 F.3d 1357, 1363, 63 USPQ2d 2002, 2008 (Fed. Cir. 2002). showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See id.; In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976). Only those arguments actually made by appellants have been considered in this decision. Arguments which appellants could have made but chose not to make in the brief have not been considered and are deemed to be waived [see 37 CFR § 41.37(c)(1)(vii)(2004)].

We consider first the rejection of claims 1-4 and 9 based on Cole and Tokuda. The examiner has indicated how these claims are deemed to be rendered obvious by the teachings of Cole and Tokuda [answer, pages 3-4]. Although the examiner does not address the specific limitations of independent claim 1, the examiner asserts that Cole teaches a detector for spectroscopic detection, and Tokuda teaches a detector with stacked detectors with different wavelength sensitivity and enhanced wavelength selectivity. The examiner finds that it would have been obvious to the artisan to use Tokuda's detector in Cole's device.

Appellants argue that Cole was not faced with the problem of detecting a band of radiation that was wider than could be detected by a single type of detector. They also argue that Tokuda is concerned with distinguishing between two frequencies and not detecting a broad spectrum passed by a bandpass filter. Appellants argue that there is no suggestion to combine the teachings of Cole and Tokuda. They assert that the combined teachings would distinguish between different frequencies but would not detect low and high wavelength bands as claimed. Appellants insist that the collective teachings do not suggest the claimed ability to detect a combination of adjacent wavelength bands [brief, pages 10-12].

The examiner responds that the purpose of the claimed invention is not relevant to the claimed structure. The examiner asserts that Cole, Tokuda and appellants all perform the same function with a Fabry-Perot filter of scanning ranges of bandwidths [answer, pages 6-9].

Appellants respond that the examiner's answer fails to point out where in either reference the claim elements of a first detector and a second detector functioning as claimed are disclosed. Appellants assert that there is a difference between distinguishing between frequencies as in the prior art and detecting a high and low band with two detectors wherein the two bands could not both be detected by either one of the individual detectors [reply brief, page 2].

We will not sustain the examiner's rejection of these claims for essentially the reasons argued by appellants in the briefs. We agree with appellants that there is no motivation to combine the teachings of Cole and Tokuda because the combination would defeat the purpose of each. While Cole is designed to detect wavelengths passed by a bandpass filter, Tokuda is designed to detect discrete frequencies that are clearly distinguishable from each other. We do not see how the artisan would have been motivated to detect adjacent bands of wavelengths in Cole as

claimed based on the detection of unrelated discrete frequencies as taught by Tokuda. We note that although Cole teaches detection of a plurality of different bands of wavelength in Figure 4, Cole still only teaches a single detector for each bandpass filter. Although Tokuda teaches two detectors, they cannot be applied to Cole's device to achieve the claimed invention for reasons argued by appellants in the briefs.

With respect to the rejection of claims 5-8 and 12 based on Cole, Tokuda, Hier, and Kozlowski, the examiner has indicated how these claims are deemed to be obvious over the applied prior art [answer, pages 4-5]. In addition to the arguments considered above, appellants argue that the examiner has failed to establish a prima facie case of obviousness. They also argue that the claimed overlapping feature of the wavelengths would destroy the ability of Tokuda to distinguish between frequencies [brief, pages 13-14]. The examiner disagrees with appellants' position and points to findings in support of the rejection [answer, pages 9-10]. Appellants respond that Hier and Kozlowski do not make up for the deficiencies in the combination of Cole and Tokuda [reply brief, page 2].

We will not sustain the examiner's rejection of these claims for essentially the reasons argued by appellants in the briefs

and for the reasons discussed above. We agree with appellants that Hier and Kozlowski do not overcome the deficiencies in the main combination discussed above.

With respect to the rejection of claims 10, 11, 13-17, 19, 23, and 24 based on Cole, Tokuda, and Yokoi, the examiner has indicated how these claims are deemed to be obvious over the applied prior art [answer, pages 5-6]. In addition to the arguments considered above, appellants argue that the examiner has failed to provide evidence in support of the findings with respect to claims 14 and 15. They also argue that the claimed overlapping feature of the wavelengths would destroy the ability of Tokuda to distinguish between frequencies [brief, pages 14-15]. The examiner disagrees with appellants' position and points to portions of Kozlowski and Cole in support of the rejection of claims 14 and 15 [answer, page 10]. Appellants respond that Yokoi does not make up for the deficiencies in the combination of Cole and Tokuda [reply brief, page 3].

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We will not sustain the examiner's rejection of these claims for essentially the reasons argued by appellants in the briefs and for the reasons discussed above. We agree with appellants that Yokoi does not overcome the deficiencies in the main combination discussed above.

With respect to the rejection of claims 20-22 based on Cole, Tokuda, Yokoi, Hier, and Kozlowski, the examiner has indicated how these claims are deemed to be obvious over the applied prior art [answer, page 6]. In addition to the arguments considered above, appellants argue that the examiner has failed to establish a prima facie case of obviousness [brief, page 15]. The examiner disagrees with appellants' position for reasons discussed above [answer, pages 10-11].

We will not sustain the examiner's rejection of these claims for essentially the reasons argued by appellants in the briefs and for the reasons discussed above.

In summary, we have not sustained any of the examiner's rejections of the claims on appeal. Therefore, the decision of the examiner rejecting claims 1-17 and 19-24 is reversed.

Reversed

ERROL A. KRASS

Administrative Patent Judge

JERRY SMITH

Administrative Patent Judge

BOARD OF PATENT

APPEALS AND

INTERFERENCES

MAHSHID D. SAADAT

Administrative Patent Judge

JS/ce

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH
1600 TCF TOWER
121 SOUTH EIGHT STREET
MINNEAPOLIS, MN 55402